

First sight records of White-chested Swift *Cypseloides lemosi* in Bolivia, with documented records of *C. lemosi* and White-chinned Swift *C. cryptus* in Peru

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SUMMARY.—We present new records of the little-known White-chested Swift *Cypseloides lemosi* from northern Peru and north-west Bolivia; photographic documentation is available for one of the Peruvian records, whilst the sight-only Bolivian records represent the species' first mention for the country. We also present a photographically documented record of the almost equally poorly known White-chinned Swift *C. cryptus* from north Peru, along with two previously unpublished specimen records from the same country, and discuss some aspects of the identification of both these swifts.

The poorly known White-chested Swift *Cypseloides lemosi*, Eisenmann & Lehmann, 1962, was described from south-west Colombia, in which country there have now been records in dptos. Valle, Cauca and Amazonas, with an overall altitudinal range of 350–2,000 m (Chantler & Driessens 2000, Downing & Hickman 2002). It was subsequently discovered in north-eastern Ecuador, in prov. Napo, where the species was first noted as recently as March 1990 (Ridgely & Greenfield 2001, Howell 2002). Records in this country are from the east-slope subtropics, foothills and lowlands of Amazonia, with those in the latter region being mainly in July–August, as well as a single claim from coastal west Ecuador (Lopez-Lanús 2001). In August 1994, *C. lemosi* was observed for the first time in northern Peru, during a multidisciplinary survey of the Cordillera del Cóndor, with tape-recorded documentation (Schulenberg & Awbrey 1997). There have been several subsequent sight records in Peru, as far south as dpto. Cusco, in Manu Biosphere Reserve (Walker *et al.* 2006), and well into western Amazonia at the río Yavarí (Lane *et al.* 2003, Schulenberg *et al.* 2007), making it almost unsurprising that there should have been a claim from adjacent Brazil, at Palmarí Lodge, on the east bank of the Yavarí (Javari), in Amazonas state, on 10 September 2004 (S. Hansson *in Cotinga* 26: 92). Lane *et al.* (2003) witnessed an apparently large number of *C. lemosi*, consorting with other swifts, on migration over the Yavarí from Brazil into Peru on 28 March 2003. However, there have been no published specimen / photographic records away from Colombia. Here we report the first observation of White-chested Swift in Bolivia, marking a new southernmost limit for *C. lemosi*, along with photographic records of this species and White-chinned Swift *C. cryptus* in Peru, as well as two previously unpublished specimen records of the latter from Peru.

White-chested Swift

Bolivian observations.—Between 27 and 29 December 2005, IR and MGA were conducting ornithological field work on the east slope of the Andes between Caranavi (15°50'S, 67°33'W), in dpto. La Paz, and Rurrenabaque (14°26'S, 67°31'W), in dpto. Beni (Fig. 1). Via Ruta Nacional 3 and 8, they traversed an elevational gradient commencing at just over 600 m down to 250 m. On 28 December they observed a group of ten White-chested Swifts in

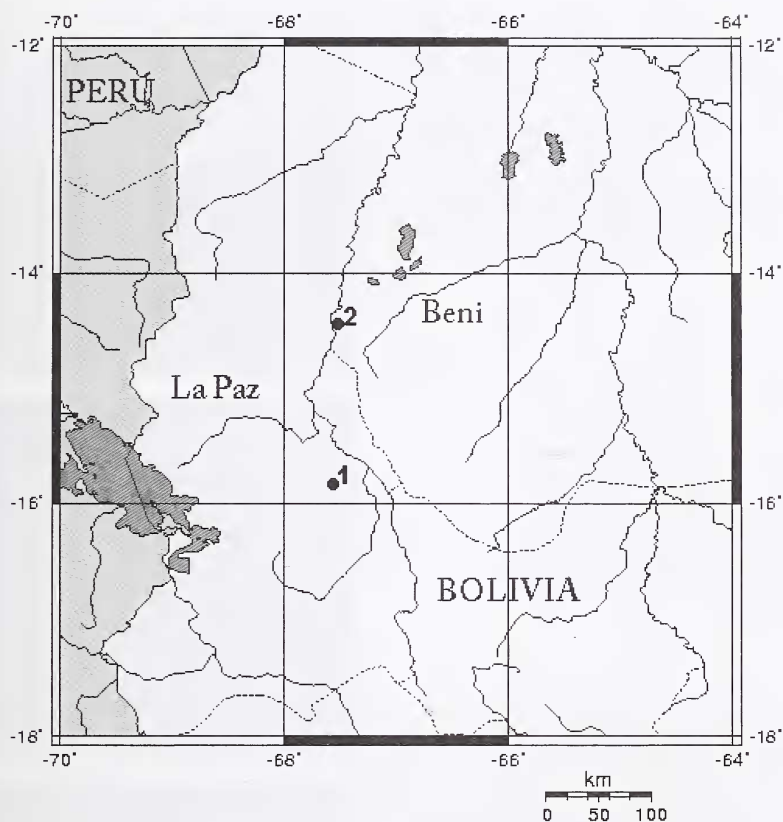


Figure 1. Map showing the region of Bolivia in which IR and MGA observed White-chested Swift *Cypseloides lemosi*. Localities are denoted as follows: 1 = Caranavi, dpto. La Paz; 2 = Rurrenabaque, dpto. Beni.

flight over an extensive area of secondary woodland in the montane zone north-east of Caranavi, on the outskirts of the village of Carrasco. The next day, at 07.30 h, IR observed another group of *C. lemosi*, this time numbering 30 individuals, together with a group of other swifts comprising White-collared Swift *Streptoprocne zonaris* and Short-tailed Swift *Chaetura brachyura* in the environs of Rurrenabaque. An hour later, at 08.30 h, 2 km away, IR observed again what he considered to be the same group of birds. Around Rurrenabaque natural habitats have been extensively modified by man's activities, and the best-preserved fragments were atop low hills. Identification of the swifts concerned as belonging to the genus *Cypseloides* was made on the basis of their flight silhouette, which was similar to that of congeners with which IR and MGA are familiar. IR, especially, was cognisant of the difficulties of specifically identifying *Cypseloides* spp., including their separation from members of other genera of Apodidae, but the white chest patch (lacking in congenics that might be expected in this area, namely Rothschild's Swift *C. rothschildi* and *C. cryptus*) was clearly noticed. In fact, in this case, greater care was needed to distinguish the *C. lemosi* from *S. zonaris*, as was noted by Hilty & Brown (1986), but fortunately during the observations on 29 December the two species could be compared directly, when the larger overall size, the longer and proportionately slimmer wings, and complete white collar of the White-collared Swifts could be fully appreciated. Ours are the first sightings of White-chested Swift in Bolivia (Hennessey *et al.* 2003, Herzog & Maillard 2008) and represent a range extension of c.600 km from the previous southernmost known site.

Figure 2. The environs of Caranavi, dpto. La Paz, Bolivia, over which area a group of White-chested Swift *Cypseloides lemosi* was observed on 28 December 2005 (Ignacio Roesler)

Figure 3. White-chested Swift *Cypseloides lemosi*, presumed female, Abra Patricia, San Martín, Perú, 25 October 2008 (Hadoram Shirihai / *Photographic handbook of birds of the world*, by Jornvall & Shirihai, A. & C. Black, London); note the slight tail-fork, striking contrast between the paler flight-feathers and darker underwing-coverts, the pale breast-band, which obviously does not extend onto the neck (although it is narrower than the heart-shaped patch shown by many individuals, and appears to be slightly higher on the breast than usual), and the rather longer wings than in Chestnut-collared Swift *Streptoprocne rutila*.

Figure 4. Juvenile White-chinned Swift *Cypseloides cryptus*, Abra Patricia, San Martín, Perú, 25 October 2008 (Hadoram Shirihai / *Photographic handbook of birds of the world*, by Jornvall & Shirihai, A. & C. Black, London); note the obvious white tips to the underparts, from the mid breast down, which become much more marked, forming a blotchy effect, over the crissum.

Peruvian observations.—During a photographic trip to the north of the country, in mid-September–mid-November 2008, White-chested Swifts were observed twice. On 30 September, DB and GMK watched a flock of c.20 *C. lemosi* flying south in a single group over the río Yanayacu, close to Muyuna Lodge, 140 km south of Iquitos, in dpto. Loreto. They were identified based on their general structure, which permitted their assignment to *Cypseloides*, and the diffuse and irregular white breast patch visible on several individuals in the flock confirmed the species identification.

Between us, we have extensive experience of almost all potential confusion species recorded in South America. Subsequently, on 25 October, DB, GMK and HS were observing large numbers of White-collared Swifts *Streptoprocne zonaris* and Chestnut-collared Swifts *S. rutila* departing their montane roost sites, east of the pass at Abra Patricia, dpto. San Martín, at c.1,900 m (c.05°40'S, 77°46'W). Some were passing <50 m from us, but others were up to 250 m distant. HS was photographing the swifts, whilst DB and GMK scanned the flock with binoculars. GMK eventually drew the others' attention to two birds, which he identified as *C. lemosi*, based on their overall size (fractionally larger and longer-winged than *S. rutila*), only very slightly forked tails (compared to *S. zonaris*, whereas most *S. rutila* appeared to have square-ended tails), blunter and shorter wings than *S. zonaris*, and the white patch confined to the breast, rather than extending as a complete collar. Unfortunately, it was not possible to distinguish any vocalisations definitely emitting from the two birds we were watching. We concur with Howell (2002) that in shape and structure, e.g. wing length etc., *C. lemosi* seems closest to American Black Swift *Cypseloides niger*.



HS photographed one individual at a distance of 200–300 m (Fig. 3), apparently a female, based on the rather smaller white breast patch. The underwing pattern is typical of the genus in the notably pale flight feathers contrasting very well with the much darker underwing-coverts. Both *Streptoprocne* and *Chaetura* also show broadly similar patterns, but the level of contrast is often much less striking in even light conditions in the former genus (see photographs of *S. zonaris* and Biscutate Swift *S. biscutata* in Kirwan 2007) and in *Chaetura* the pale area is also less strikingly contrasting in most lights whilst the coverts (i.e. the dark area) occupy a perceptibly more restricted part of the wings. To our knowledge, this constitutes the second documented record of *C. lemosi* for Peru, and an in-country altitudinal range extension of c.300 m (Schulenberg *et al.* 2007).

White-chinned Swift

Peruvian field records.—Remarkably, when we subsequently studied all of the photographs of swifts taken by HS at Abra Patricia, we found that he had also photographed, at equally long range, a juvenile of the almost equally poorly known *Cypseloides cryptus* (Fig. 4), thereby underlining the possibilities and opportunities presented by digital SLR high-speed photography. The white-tipped feathers of the underparts, which become broader and more obvious over the vent, are obvious in the photograph, making the identification reasonably straightforward, as juvenile *S. rutila* does not display such a pattern (Chantler & Driessens 2000, Schulenberg *et al.* 2007). Presumed juveniles of *S. rutila* photographed on the same day at this site show some pale tips to the larger wing-coverts but none on the underparts. *C. niger*, which has never been recorded in Peru (Schulenberg *et al.* 2007), or Ecuador (Ridgely & Greenfield 2001), can show variable white tips to the feathers of the rear underparts (Zimmer 1945), but the bird photographed by HS lacks the strong contrast between the darker underparts and paler head to upper breast typical of *C. niger borealis* (the only race definitely known to occur in South America), and has an obviously square-ended tail, whereas *C. niger* usually shows a more or less obvious tail-fork in males, often reduced to a notch in females (Stiles & Negret 1994). Juvenile *C. lemosi* is reportedly much like the female of that species, i.e. in showing a much-reduced but evident white breast patch (Chantler & Driessens 2000), and would presumably also possess that species' 'larger swift' proportions.

Specimen records from Peru.—Other than the type specimen, from the 'Inca Mine' on the río Távora (Zimmer 1945), there has been no previously published documentation for *C. cryptus* in Peru. However, Zimmer (1945, 1953) already drew attention to two problematic specimens of *Cypseloides* swifts held in what is now The Natural History Museum, in Tring, UK (BMNH). Both specimens, one, a male, from Cosñipata, western Peru (close to the type locality of *cryptus*) collected by H. Whitely in (November?: label partially illegible) 1868 (BMNH 90.2.18.58), and the other labelled as being from 'Ecuador' from the Gould collection (BMNH 88.7.30.66), were originally identified as Sooty Swift *C. fumigatus*, a species now considered to be confined to south-east South America (Chantler 1999). The two were re-identified as *C. cryptus* as long ago as 1966, by C. T. Collins, and have been catalogued by the museum as that species ever since. Despite this, P. Chantler, who worked in the same collection in preparing the text of Chantler & Driessens (2000) considered there to be 'only [one] certain specimen from that country [Peru]', and apparently continued to treat the Whitely specimen as pertaining to *C. (fumigatus) rothschildi*. Collins (1968) published on the identity of the Ecuadorian specimen, which remains the only documentation of the species for that country (Ridgely & Greenfield 2001). Both specimens were re-examined by P. C. Rasmussen and D. Davison in 2001, and by GMK in 2009. Zimmer (1945, 1953) did not examine either bird, but published measurements of the Peruvian specimen (Taczanowski

TABLE 1

Mensural data for two specimens of White-chinned Swift *Cypseloides cryptus* from Ecuador and Peru, held at The Natural History Museum, Tring, UK (BMNH), compared with published data for the same species and published and unpublished measurements for Sooty Swift *C. fumigatus* and Rothschild's Swift *C. rothschildi* (Zimmer 1945, Eisenmann & Lehmann 1962, Belton 1984, Marín & Stiles 1992, Chantler & Driessens 2000). All data are from specimens, except those published by Marín & Stiles (1992), which are from live birds. Our data = specimens measured by GMK at BMNH using a metal wing-rule and digital callipers, and following standard parameters. All measurements in mm.

Source → Taxon ↓	Zimmer (1945)	Eisenmann & Lehmann (1962)	Belton (1984)	Marín & Stiles (1992)	Chantler & Driessens (2000)	Own data (from BMNH specimens)
<i>C. cryptus</i>						
Wing	136.5 (<i>n</i> =1)	136–143 (<i>n</i> =4)		136.44 ± 1.71 (<i>n</i> =14)		142 (<i>n</i> =2)
Tail	43 (<i>n</i> =1)	40–49 (<i>n</i> =4)		44.02 ± 1.40 (<i>n</i> =10)		46–47 (<i>n</i> =2)
Tarsus	16 (<i>n</i> =1)	15–16 (<i>n</i> =4)		15.69 ± 0.32 (<i>n</i> =13)		16.34–17.3 (<i>n</i> =2)
<i>C. fumigatus</i>						
Wing		153 (<i>n</i> =1)	135–147 (<i>n</i> =4)		142.5–146.5 (<i>n</i> =4)	142–145 (<i>n</i> =4)
Tail		49 (<i>n</i> =1)				49–55 (<i>n</i> =4)
Tarsus		12 (<i>n</i> =1)				13.2–14.61 (<i>n</i> =4)
<i>C. rothschildi</i>						
Wing		147–157 (<i>n</i> =7)				
Tail		47–56 (<i>n</i> =7)				
Tarsus		12 (<i>n</i> =1)				

1884: 232) suggested to him that the identification as *fumigatus* should stand. The Ecuadorian specimen (wing-chord 142 mm, tail 46 mm, tarsus 16.34 mm: GMK pers. obs.) is a classic example of *cryptus*, having the chin and throat notably pale, whilst the Whitely bird from Peru only has a very restricted pale area on the chin, which would be almost certainly invisible in the field (as is often the case with this species: Chantler & Driessens 2000). Nonetheless, it can still be confidently identified as *cryptus*, based on the general plumage coloration, and the shape and size of the nostrils, which differ from *C. niger* (Chantler & Driessens 2000: 110; GMK pers. obs.) and *C. fumigatus* (GMK pers. obs.). Its measurements (wing-chord 142 mm, tail 47 mm, tarsus 17.3 mm: GMK pers. obs.) are, *contra* Zimmer (1945, 1953), far more concordant with *cryptus* than *fumigatus* (see Table 1), especially in the shorter tail and longer tarsi, and given that the classic Ecuadorian specimen of *cryptus* also has a long wing-chord (like two Colombian male specimens: Eisenmann & Lehmann 1962). Given this, we can confidently state that there is no record of Rothschild's Swift *C. rothschildi* (a species formerly considered conspecific with *C. fumigatus*) for Peru, *contra* Chantler & Driessens' (2000) repetition of Zimmer (1945), either as a winter visitor (Short 1975) or vagrant. Finally, there is another unpublished specimen from Peru, held at the Louisiana State University Museum of Zoology, in Baton Rouge (LSUMZ 98105) of a *C. cryptus* from Abra de Maruncunca, 10 km south-west of San José del Oro, dpto. Puno (2,000 m), which was collected by LCB (collector's number 1527), on 12 November 1980, being caught by hand (!) fluttering against the wall of a well-lit tent at 22.45 h. It was a female, with ovary 7 × 4 mm, largest ova 1 mm and 0.5 mm. The skull was 50% ossified (indicating immaturity); no moult; total length 125 mm; very fat; weight 31.3 g; insect parts in stomach.

Discussion

Neither *C. lemosi* nor *C. cryptus* was mentioned for the Abra Patricia region by Hornbuckle (1999), but T. S. Schulenberg (*in litt.* 2009) informs us that the late P. Coopmans (*in litt.* to Schulenberg, November 2003) observed several *C. lemosi* in the area on 18 October 2003, and T. S. Schulenberg (*in litt.* 2009) & F. P. Angulo observed a small flock at the same place as we made our observations in late September 2007. Stiles & Negret (1994) already noted that *C. cryptus* can join mixed flocks with *S. zonaris*, *C. lemosi* and *S. rutila*, based on observations in southern Colombia, and *C. cryptus* and *S. rutila* have also been observed together in Costa Rica (Marín & Stiles 1992). The presence of a fresh juvenile could suggest that the species breeds somewhere in the environs of Abra Patricia (M. Marín *in litt.* 2009).

The altitude of our second Bolivian observation, 250 m, is the lowest specifically mentioned in the literature to date, although given the Amazonian observations reported above and in other literature *C. lemosi* can clearly be expected to occur down to sea level. Observations from throughout the range of White-chested Swift, from montane regions to the lowlands of Amazonia indicate that the species is a habitat generalist and that it is not restricted to inter-Andean valleys, as was formerly thought to be the case (Hilty & Brown 1986, Chantler 1999), or at least not year-round. More observations are needed to determine whether *C. lemosi* performs regular intra-tropical migrations. The forests surrounding Rurrenabaque, in those areas visited by IR and MGA, are extremely threatened, principally due to expanding agricultural concerns, especially large farms. BirdLife International (2008) currently treats *C. lemosi* as Low Risk, given that advancing deforestation in many parts of the species' known range probably favours it. Future workers should seek to identify the species' breeding areas in both Bolivia and Peru, and identify any threats to such places. There are numerous waterfalls in the environs of Caranavi, which might serve as breeding sites for *C. lemosi* (IR & MGA pers. obs.), and given this and the time of year (December) in which our observations were made it seems quite probable that the species breeds in Bolivia (as well as in Peru).

It seems certain to be the case that the overall status and distribution of *C. lemosi* (and *C. cryptus*) have been under-estimated due to the difficulties in identifying the species, as evidenced in part by the recent discovery of *C. cryptus* in northern Brazil (Whittaker & Araújo Whittaker 2008; GMK pers. obs.). There have been observations of suspected *C. cryptus* at Palmari Lodge on the east bank of the Yavarí, and Lane *et al.* (2003) suspected that some of this species were also involved in the large swift migration they witnessed on the Peruvian side in late March 2003 (see above). Whilst the white chest offers a 'sure-fire' means of separating *C. lemosi* from other swifts, lighting conditions under which the extent of this can be accurately determined need to be exceptionally favourable, and the distance of observation is often a telling factor preventing certain identifications.

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